

## **ABSTRACT**

### **NERVE CONDUCTION STUDY IN VIBRATORY TOOL USERS.**

**BACK GROUND:** Industrialisation has led to the use of chainsaw. The chainsaws produce vibrations during operation. Vibrations produce injury to muscles, nerves and tendons. **AIM:** To study the nerve conduction velocity in chainsaw users. The motor and sensory nerve conduction velocity of median, ulnar nerves on both sides and motor nerve conduction study of radial nerves on both sides were done to study the effect of vibration. **METHODOLOGY:** 50 male workers using chainsaws were selected. 50 male healthy volunteers working in nearby offices were selected. Motor and sensory nerve conduction velocities in median and ulnar nerves of both forearms and motor nerve conduction velocity in radial nerves of both forearms were studied. **RESULTS:** Motor conduction velocity of median, ulnar and radial nerves of individuals exposed to vibration were not affected on both sides. The sensory nerve conduction velocity in median and radial nerves on both sides in the vibration exposed individuals were reduced when compared with those not exposed to vibration with a 'p' value of  $<0.01$  is statistically significant. **CONCLUSION:** The chainsaws produce vibrations which affected peripheral nerves resulting in the delayed sensory nerve conduction velocity in median and ulnar nerves of both hands in the vibration exposed individuals.

**Key words:** Chainsaw nerve conduction study vibrations.